

IDPH Interim Check List for Healthcare Providers: Managing Patients who may have Novel Coronavirus (2019-nCoV) Infection

1. Identify patients who may have respiratory illness caused by 2019-nCoV.

Place visible signage requesting visitors with a fever or respiratory symptoms and recent international travel to notify a hospital staff member. Suggested signage is available on the IDPH coronavirus website.

2. Immediately isolate patients reporting fever (T >100.4 °F or >38 °C), respiratory symptoms (e.g., cough, shortness of breath), and travel to mainland China within 14 days prior to illness onset.

- Place surgical mask on patient
- Place patient in private room with door closed (ideally negative pressure airborne isolation room)
- Do not leave the patient in a waiting room with other patients

3. Implement the following infection control procedures for healthcare workers. Standard precautions

- Contact precautions (gloves, gown)
- Eye protection (e.g., goggles, face shield)
- Airborne precautions (e.g., N95 mask or PAPR)

4. Immediately report patient to your local health department (or, if unavailable, the Communicable Disease section at IDPH: phone 217-782-2016 during office hours or 800-782-7860 out of hours). Public Health will advise on the next steps.

5. Collect specimens for laboratory diagnosis of 2019-nCoV.

a) Collect one specimen from each category (1 lower respiratory, 2 upper respiratory and 1 serum) **for a total of four specimens** as soon as possible regardless of symptom onset.

- *Lower respiratory*
 - **Bronchoalveolar lavage, tracheal aspirate, or pleural fluid:** 2-3 mL in a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
 - OR-
 - **Sputum:** Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

- *Upper respiratory*
 - **Nasopharyngeal swab AND oropharyngeal swab (NP/OP swab):** Use a synthetic fiber swab with plastic shaft. Do not use calcium alginate swabs or swabs with wooden shafts. Place swab in a sterile tube with 2-3 ml of viral transport media. **Do NOT combine NP/OP swab specimens. Keep swabs in separate viral transport media collection tubes.**
 - OR-
 - **Nasopharyngeal wash/aspirate or nasal aspirate:** 2-3 mL in a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
- Serum
 - **Children and adults:** Collect 1 tube (5-10 mL) of whole blood in a serum separator tube.
 - **Infant:** A minimum of 1 mL of whole blood is needed for testing pediatric patients. If possible, collect 1 mL in a serum separator tube.

b) Refrigerate specimens at 2-8°C and transport on cold pack.

c) Complete the IDPH test requisition for *each specimen* collected. The form is available at <http://dph.illinois.gov/sites/default/files/forms/formsohp-labscd-test-requisition.pdf>.

d) Samples should be sent urgently and immediately, shipped on an ice pack with expedited shipping, to any IDPH laboratory. An authorization code must be provided by your local health department prior to shipping. IDPH laboratory addresses are:

IDPH Carbondale Lab
1155 S. Oakland St
Carbondale, IL 62902

IDPH Chicago Lab
2121 W Taylor St.
Chicago, IL 60612

IDPH Springfield Lab
825 N. Rutledge St
Springfield, IL 62794

6. Continue medical evaluation and empiric treatment for other causes of respiratory infection or pneumonia as clinically indicated.

All patients with suspected nCoV-2019 infection may also be tested for common causes of respiratory infection and pneumonia as clinically indicated. **Collection of specimens for other respiratory pathogens should be done separately from 2019-nCoV testing, and should not delay collection of specimens for 2019-nCoV.**

7. Do not discharge or release patient without prior approval from Public Health. Continue patient isolation and infection control procedures as above.

8. Room Decontamination Environmental surfaces:

- Rooms may be disinfected using an EPA registered disinfectant that is effective against the human coronavirus. Follow manufacturer's instructions for proper use of the product selected including surface contact time.

- Bleach is not required for cleaning and disinfection of the room.
- Staff entering and cleaning the room must wear PPE appropriate for Contact and Airborne Isolation unless the room has been allowed to sit empty allowing the air exchanges to filter and remove the airborne contaminants. See below.

Airborne isolation room decontamination:

After discharge, airborne isolation rooms must be allowed to sit unoccupied until the airborne contaminants have been removed. This time will vary based upon the room air exchanges. Most airborne isolation have a minimum of 12 air exchanges which requires at least 35 minutes to efficiently remove air contaminants. See attached table. (CDC)

TABLE 1. Air changes per hour (ACH) and time required for removal efficiencies of 99% and 99.9% of airborne contaminants*

ACH	Minutes required for removal efficiency†	
	99%	99.9%
2	138	207
4	69	104
6	46	69
12	23	35
15	18	28
20	14	21
50	6	8
400	<1	1

* This table can be used to estimate the time necessary to clear the air of airborne *Mycobacterium tuberculosis* after the source patient leaves the area or when aerosol-producing procedures are complete.

† Time in minutes to reduce the airborne concentration by 99% or 99.9%.

More information may be found at

<http://dph.illinois.gov/sites/default/files/01.21.20%20IDPH%20nCoV%20HAN.pdf>

https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm?s_cid=rr5417a1_e